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FIRE-FOUNTAINS

Fire-Fountains; the Kingdom of Hawaii, its Volcanoes, and the History of its Missions. By C. F. Gordon Cumming. In two vols. 8vo. (Edinburgh and London: William Blackwood and Sons, 1883.)

MISS GORDON CUMMING has, in the work before us, given a most lively and interesting account of the Sandwich Islands. The large amount of experience which she has gained during five years of almost continual travel among the islands of the Pacific has enabled her to make careful comparisons between the physical features, the productions, and the populations of the different groups. In her two previous works, "A Lady's Cruise in a French Man-of-War," and "At Home in Fiji," our authoress has given us her impressions of Tahiti and the Fiji Islands respectively.

It is evident that Miss Gordon Cumming's first sentiments on arriving in the islands were those of disappointment. In productiveness, in the picturesque character of their scenery, in the beauty of their coral reefs, and in richness of flora, the Hawaiian Islands must certainly yield the palm to the Archipelagos of the Pacific. Even Kilauea itself failed to satisfy the traveller's expectation, for at the time of her first visit the fires of Halemaumau seemed to be almost extinct. Fortunately these first feelings of disappointment were to some extent removed by what the authoress subsequently witnessed during her long sojourn in the country.

The title of "Fire-Fountains" may perhaps lead a geologist to anticipate a more than usually exact account of the volcanic phenomena of these interesting islands. The extreme liquidity of the Hawaiian lavas enables them—as Dana, Brigham, Coan, and others have so well shown—to be thrown up into actual "fountains," and such jets have been witnessed both in Kilauea and Mauna Loa, rising to the height of several hundred feet. Any expectations of scientific accuracy in the account of the volcanic phenomena are, however, dispelled when we turn to the work itself. Miss Gordon Cumming's descriptions are wonderfully graphic, and a small amount of geological training would have enabled her to avoid popular errors, and employ accurate instead of misleading terms, thus making them valuable records of the phenomena she witnessed. Unfortunately, as in so many similar cases, this small amount of previous training was wanting.

The first part of the work consists of descriptions of the physical features of the group and of the characteristics of the inhabitants, and here the authoress largely relies upon her own observation, and furnishes us with many instructive comparisons with Tahiti and Fiji.

The second part of the book, which contains a history of the islands and of missionary enterprise in them, is of course compiled from published works, the information thus acquired being supplemented by facts derived from independent sources, such as letters and conversations.

The visit to Kilauea has been so often described that it may seem difficult to understand how any ordinary traveller can find anything new to say on the subject. But Miss Gordon Cumming had the good fortune (though she

does not seem to have appreciated it at the time) to see the crater under somewhat exceptional conditions, as the following account will show (vol. i. pp. 164, 165):—

"After traversing three miles of this strangely varied lava-bed we reached the base of that inner circle of crags which within the last few months have been thrown up all round the central crater—i.e. the Halemaumau. So rapidly have they been upheaved, that they now form a ring 600 feet in height; and up this steep ascent we had to climb in order to look into the Lake of Fire.

"It was a toilsome ascent over very brittle lava; but Roback kept cheering me by telling me what a grand sight awaited me, and that he had never seen the lake in finer action than last week. So we climbed over coils of huge hollow vitreous lava-pipes, which constantly broke beneath our weight, and over ridges which looked to me like gigantic sugarsticks pulled out and twisted—and at last we gained the summit, and looked eagerly for the much-described Lake of Fire.

"THERE WAS NONE! at least nothing worth speaking of, in the first instance. I turned to look at my guide, and he stood staring in stupefied, bewildered amazement. He could not believe his own eyes. Only a few days had elapsed since he had led a party of Americans to the very spot where he now stood beside me in speechless wonder at the change.

"They had watched the blood-red waves dashing in scarlet spray against the cliffs on the farther side of the lake of molten fire, then rushing back to form a mad whirlpool in its centre, and thence, as if with a new impulse, flinging themselves headlong into a great cavern which undermined the lava-terrace just below the spot where I was now standing."

This was written on October 29, 1879, but three days afterwards the authoress has a very different state of things to chronicle (vol. i. pp. 186-189):—

"November 1st.

"Last night was Hallowe'en—the great fire-festival of our ancestors—and here it has been celebrated in right royal style, for the fire-spirits have broken loose and are holding high revel.

"The flow is increasing rapidly and is magnificent. The fire has burst out at so many points together that it has formed a new lake in the outer crater, in which fire-jets are spouting and molten lava thrown high in mid-air, great masses of red-hot solid lava being tossed to a height of from forty to fifty feet, while from the overflowing rim, or from weak points in the sides of the lake-basin, flow rivers of lava, forming a network of living, rushing fire, covering fully two square miles of the very ground over which I was walking only two days ago. It is a scene of marvellous beauty and is inexpressibly fascinating.

"From the edge of the crater-wall I have watched each stage in the growth of this strange new lake. I have seen it gradually rise higher and higher, till at last it overflowed in glowing streams, like rivers of golden syrup, but brighter far—an indescribable colour. The centre of the lake is oftenest of a silvery grey, only crossed by zigzag lines of flame colour and deep rosy red; but all round its shores it is continually surging and upheaving great crested billows, which break in fiery surf and toss up clouds of fire-spray. Sometimes the whole lake appears to be in a tremendous commotion—heaving and trembling as if acting obedient to some pressure from the furnace below.

"About a dozen cones have formed in and around the lake, each a distinct fire-fountain, yet all flameless—only merrily flinging about the molten metal: a bouquet of rare fireworks.

"These cones are miniature volcanoes—spouting liquid lava in the most sportive manner, playing gracefully like true fountains—spouting like intermittent geysers, and

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falling in showers of red hail—sometimes silently, sometimes with puffing and spluttering, varied with a roar like an angry bull; then a hush, followed by low moaning sobs.

"Some of these explosive forces have not built themselves chimneys, or, if they have, the lake has melted them, for they only betray their existence by suddenly bursting beneath the surface, like torpedoes, and tossing up red rockets.

"From the crag above I looked down upon a heaving, restless expanse of dull red almost entirely coated over with a silvery-grey scum, intersected by flowing rivers of red gold. The ceaseless movement beneath the surface kept up a glancing, gleaming play of white and red light, glistening like quicksilver in motion. Sometimes there came a swirling eddy, like the rush of a Highland stream.

"Then, again, the lava seemed to writhe and twist as if in agonised contortions, and then commenced a violent boiling and bubbling preparatory to its bursting into active fire-fountains. These play sometimes singly, sometimes alternately, sometimes a dozen burst into simultaneous action—like some marvellous display of rockets, flinging their fiery rain on every side, then dying away altogether, till the silvery coating spreads so evenly over the surface of the lake, that, but for the sulphurous exhalations and columns of smoke, it might almost be mistaken for some cool refreshing pool. In truth, the white vapours which play so eerily among those black rock-masses, might well be morning mists floating upward from a quiet mountain-tarn.

"This, however, is a delusion not to be cherished for long, especially towards sunset; for then the lake appears in its true glory, and all the wonderful chemical colours which were lost in the full light of day reveal themselves, the difference of the scene before and after sundown being that of any huge smelting works, as seen by day or by night, only magnified ten thousand times. Then the scale of colour varies from deepest chocolate, crimson, and scarlet, to orange, yellow, and primrose tints, and the silvery grey becomes tinged with pink and violet, while the solid rocks become ever more intense in their blackness; and the many-tinted sea plays around them, and dashes over them, and from time to time detaches some huge fragment, which falls with thunderous crash, reverberating from crag to crag.

"As the twilight faded away, my kind landlord rigged up blankets and lanterns to make me a snug sketching-point on the hill above this house, whence I could watch the glory undisturbed, and attempt to preserve notes in colour, which may give you and others an idea, however faint, of the amazing scene before me. A full moon added its cool, pure light to the lurid crimson glow, which was reflected on all the overhanging clouds, as well as on the column of white steam which for ever rises from the Halemaumau itself; and these clouds, being visible at a distance of many miles, must have declared plainly to our friends in Hilo that there was unusual activity at Kilauea."

The authoress of this work did not reach the summit crater of Mauna Loa, but at the end of her book she has collected from various sources a tolerably complete account of the great outbursts of 1880 and 1881.

The details given in this volume concerning the aboriginal inhabitants and their manners and customs—or rather, we should say, of the total want of the former and the utter "beastliness" of the latter—is interesting to the anthropologist. The judgments of the authoress upon historical questions are by no means unfair, and if she does not follow American writers in treating Capt. Cook's visit as an act of piracy and his fate as a just retribution, she clearly points out that the death of the great navigator followed as a natural consequence of the sad mis-

understanding between the English and the natives. From the traditions of the natives we can now fill in many details of the story, and explain certain matters which Cook, in his total ignorance of the language of the people, could scarcely guess at. In this and in the subsequent transactions between the English under Capt. Vancouver, and the Hawaiians, it must be confessed that the natives were treated with but scant justice at the best, and in too many instances with wanton cruelty and tyranny.

The admirable illustrations of this work constitute one of its most valuable features. They are reproduced by the autotype process from the sketches of the authoress. The frontispiece, showing the low rounded dome of Mauna Loa, with Kilauea on its flanks, is one of the best representations of this most wonderful district which we remember to have met with. The indefatigable traveller who has now become an acknowledged favourite with the public may be heartily congratulated upon the success of this latest production of her busy pen and pencil.

OUR BOOK SHELF

Africana, or the Heart of Heathen Africa. By the Rev. Duff Macdonald. 2 vols. (London: Simpkin, Marshall, and Co., 1882.)

NOTWITHSTANDING a large amount of professional commonplace, this work rises considerably above the level of ordinary missionary productions. The author, who administered the Church of Scotland Mission at Blantyre, south of Lake Nyassa, during the years 1878-81, applied himself diligently to the study of his dusky flock, and has embodied his experiences chiefly in the first volume, devoted to the "native customs and beliefs." The second is occupied more specially with "mission life," and with the inevitable difficulties and troubles entailed upon the writer in consequence of his accepting a position which from the first he felt to be untenable.

Since his enforced retirement from active work, Mr. Macdonald has usefully occupied his time in arranging for publication some of the rich materials collected during his stormy missionary life. Most of these materials, being the result of original observation in a new field not yet disturbed by contact with Europeans, possess great scientific value. The descriptions of the native manners, customs, beliefs, superstitions, and traditions are as interesting as they are trustworthy, and they are supplemented by two appendices, which may be specially commended to the attention of all lovers of folk-lore. These comprise numerous selections of original "native tales" and "cosmical tales," literally translated from the author's manuscript collection of tales, songs, enigmas, &c., the whole of which it is to be hoped he will be induced to publish. Some of the tales accounting for natural phenomena have at least the merit of brevity, as, for instance, that about the wind: "A great man had a daughter, and she said, 'Father, in this country I am hot, I sweat.' Then her father said, 'Come here, my child, I have pity, I will blow with my breath.' So he blew, and thence came wind" (i. 283).

It is sad to learn that trial by ordeal and torture is still as universally practised as it was in Europe during mediæval times. "When a Magololo suspects his wives, he places a stone in a jar of boiling water or oil, and orders them to fetch it up with their bare arms. He then judges of their guilt by the amount of injury they sustain. When a woman is thus convicted, he makes her confess who seduced her. In vain does the helpless creature protest that she is innocent. Notwithstanding that her arm is severely scalded, she is subjected to the most cruel